IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1.   (previously presented) An image tone level estimating method for estimating a tone level of an image, comprising:

dividing an original image into a plurality of image sub-areas according to tone level information of pixels forming the image;

computing a characteristic amount for each of the plurality of sub-areas producing characteristic amounts; and

computing a statistic amount for estimation of the tone color value level of a whole of the original image using the characteristic amounts for each of the plurality of sub-areas.

2.   (cancelled)

3.   (withdrawn) The method according to claim 1, wherein said statistic amount is computed using the characteristic amount for each said area and a weight coefficient corresponding to each said area.

4.   (withdrawn) The method according to claim 3, wherein said statistic amount is obtained by adding the weight coefficient for each said area as a weight and computing a weighted average value between areas of the characteristic amount.

5.   (withdrawn) The method according to claim 3, wherein said statistic amount is obtained by adding the weight coefficient for each said area as a weight and computing standard deviation of the characteristic amount.

6.   (withdrawn) The method according to claim 3, wherein said weight coefficient is determined based on a number of pixels forming a corresponding the area.

7.   (withdrawn) The method according to claim 6, wherein when the number of

pixels forming the area is smaller than a predetermined threshold, a weight coefficient for the area is set to 0.

8.   (withdrawn) The method according to claim 3, wherein said weight coefficient is determined corresponding to the area in a corresponding position on the image.

9.   (withdrawn) The method according to claim 8, wherein when the position of the area is closer to a center of the image, the weight coefficient for the area is set to a larger value.

10.   (withdrawn) The method according to claim 1, wherein a tone level of a pixel forming part of the image is converted into a brightness value, and the characteristic amount is computed using the conversion result.

11.   (withdrawn) The method according to claim 1, wherein a tone level of a pixel forming part of the image is converted into a chroma value, and the characteristic amount is computed using the conversion result.

12.   (withdrawn) The method according to claim 1, wherein characteristic amounts corresponding to respective pixels forming the image are averaged, and the characteristic amount is computed using an obtained average value.

13.   (withdrawn) The method according to claim 1, wherein said image is divided into a plurality of areas according to tone level information and positional information about pixels forming the image.

14.   (previously presented) An image correcting method for correcting an original image, comprising:
        dividing an original image into a plurality of image sub-areas responsive to tone level information of pixels forming the image;
        computing a characteristic amount for each of the plurality of sub-areas producing characteristic amounts;
        computing a statistic amount for estimation of the tone color value level of a whole of the original image using the characteristic amounts for each of the plurality of sub-areas;
        comparing the statistic amount with a predetermined value;

determining a correcting parameter based on the comparison result; and

correcting the original image using the correcting parameter.

15.   (previously presented) An image correcting method for correcting an original image, comprising:

generating a plurality of corrected images by correcting the original image using a plurality of different correcting parameters;

dividing the plurality of corrected images respectively into a plurality of image sub-areas responsive to tone level information of pixels forming the image;

computing characteristic amounts for the plurality of sub-areas corresponding to the plurality of corrected images;

computing an image statistic amount indicating a tone color value level of a whole corrected image using the characteristic amounts for the plurality of sub-areas for the plurality of corrected images; and

defining a corrected image obtained using a correcting parameter corresponding to an image statistic amount closest to a predetermined value among the image statistic amounts as an appropriate corrected image.

16.   (canceled)

17.   (previously presented) An image correction apparatus which corrects an original image, comprising:

an area division unit dividing the original image into a plurality of image sub-areas responsive to tone level information of pixels forming the image;

a characteristic amount computation unit computing a characteristic amount for each of the plurality of sub-areas producing characteristic amounts;

a statistic amount computation unit computing a statistic amount indicating a tone level of a whole image using the characteristic amounts of each of the plurality of sub-areas;

a correcting parameter setting unit comparing the statistic amount with a predetermined value, and determining a correcting parameter based on a comparison result; and

an image correction unit correcting the original image using the correcting parameter.

18.   (original) The apparatus according to claim 17, further comprising a weight coefficient computation unit computing a weight coefficient for each area, wherein said statistic

amount computation unit computes the statistic amount using the characteristic amount for each area and the weight coefficient for each area.

19.   (previously presented) An image correction apparatus which corrects an original image, comprising:

a first image correction unit correcting the original image using a plurality of correcting parameters and generating a plurality of corrected images;

an area division unit dividing each of the plurality of corrected images into a plurality of image sub-areas responsive to tone level information of pixels forming the image;

a characteristic amount computation unit computing a characteristic amount for each of the plurality of sub-areas producing characteristic amounts;

a statistic amount computation unit computing a statistic amount indicating a tone color value level of a whole image using the characteristic amounts of each of the plurality of sub-areas; and

a second image correction unit determining a corrected image obtained using the correcting parameter corresponding to the statistic amount closest to a predetermined value among the plurality of statistic amounts as a correction result.

20.-24 (canceled)

25-26. (canceled)

27.-31 (canceled)

32.   (previously presented) A computer-readable storage medium storing a program used to direct a computer for estimating a tone level of an image to perform a process, comprising:

dividing an original image into a plurality of image sub-areas responsive to tone level information of pixels forming the image;

computing a characteristic amount for each of the plurality of sub-areas producing characteristic amounts; and

computing a statistic amount for estimation of the tone color value level of a whole of the original image using the characteristic amounts for each of the plurality of sub-areas.

33.   (previously presented) A computer-readable storage medium storing a program used to direct a computer for correcting an original image to perform a process, comprising:

dividing an original image into a plurality of sub-areas responsive to tone level information of pixels forming the image;

computing a characteristic amount for each of the plurality of sub-areas producing characteristic amounts;

computing a statistic amount for estimation of the tone color value level of a whole of the original image using the characteristic amounts for each of the plurality of sub-areas;

comparing the statistic amount with a predetermined value;

determining a correcting parameter based on the comparison result; and

correcting the original image using the correcting parameter.

34.   (previously presented) A computer-readable storage medium storing a program used to direct a computer for correcting an original image to perform a process, comprising:

generating a plurality of corrected images by correcting the original image using a plurality of different correcting parameters;

dividing the plurality of corrected images respectively into a plurality of sub-areas responsive to tone level information of pixels forming the image;

computing characteristic amounts for the plurality of sub-areas corresponding to the plurality of corrected images;

computing an image statistic amount indicating a tone color value level of a corrected image using the characteristic amounts for a plurality of corrected images; and

defining a corrected image obtained using a correcting parameter corresponding to an image statistic amount closest to a predetermined value among the image statistic amounts as an appropriate corrected image.

35.   (previously presented) A method, comprising:

statistically processing each of regions of an original image responsive to tone level information of pixels forming the image to produce statistical amounts for each of the regions;

deriving a statistical value for the entire original image from the processing of the statistical amounts for each of the regions; and

correcting a tone color value level of the image responsive to the statistical value.

36.   (previously presented) A method of image tone color value level correction of an

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image, comprising:

dividing the image into sub-areas responsive to tone level information of pixels forming the image;

producing a statistical amount for each of the sub-areas of the image;

producing a statistical value for the entire original image from all of the statistical amounts of the sub-areas of the image; and

using the statistical value to correct a tone color value level of the entire image.

37 – 38   (cancelled)